Main Claims

- In order to understand natural language utterances we need a system that takes into account the order of discourse moves and the link between conventional form and discourse structure.
- There are particles that conventionally establish a relation with discourse moves.
- Then is such a particle: it establishes an anaphoric relation with discourse moves.

The data: Then in conditionals and across discourse

**Conditionals that accept then**

1. Well, if you finished your homework, then you can go play outside.
2. Even if Smith is dead, (then) the Sheriff wants him.
3. Whether Smith is dead or alive, (then) the Sheriff wants him.
4. If you are hungry, (then) there is pizza in the fridge.

Observation: Then is not possible if the antecedent exhausts logical space (but this alone does not explain (4)).

**Conditionals that do not accept then**

1. If Jim had asked Jack for help, then there would (have to) have been no quarrel yesterday.

Observation: The presence of then signals that (discursively) what follows then is explained by what the speaker learned from the previous discourse move and what the speaker committed to in the previous discourse move.

Previous proposals: Then in conditionals

- Iatridou (1994) and von Fintel (1994): The meaning contribution of then explains the infelicity in (2)–(4).

Some empirical problems

- Iatridou (1994): then in the conditional if \( p \), then \( q \) triggers the inference that there are \( \neg p \) alternatives in which \( q \) is not true.
- von Fintel (1994): then triggers a conventional implicature that only the \( p \) worlds are \( q \) worlds.

Proposal

**Proposal at a glance**

- Then contributes (non-truth-conditional) meaning: Then is a discourse marker.
- The same then is present in conditionals and across discourse.
- In conditionals there are two layers of modal relations.
- Then signals that the utterance of the embedded clause is motivated by information gained from the previous discourse move (that information is the antecedent).
- The utterance of a then-clause leads the hearer to reconstruct
  - what the speaker learned from the previous discourse move and
  - the (modal) relation it bears to the information gained from the then-clause (the consequent).

**Implementation**

**Discourse move**: A discourse move \( M_i \) is the utterance of a sentence structure syntactically headed by a force operator [\( a[S] \)] or [\( I_{imp[S]} \)].

**Commitment slate**: (based on Gunlogson 2008) \( \text{commit}_{BM} = \{ p : B \text{ commits to } p \text{ after } M_i \} \).

**Information gain**: \( I_{BM} = \{ p : p \in \text{commit}_{BM} \text{ and } p \notin \text{commit}_{BM_i} \} \), where \( M_i \) is the move immediately preceding \( M_i \) and \( \text{commit}_{BM_i} \) is B’s commitment slate after \( M_i \).

**Then**

- Then “coordinates” a conditional-like relation at the level of discourse.
- The antecedent “explains” the consequent.

**The meaning of then appeals to discourse moves.**

**Then** imposes felicity-conditions on the relation between two propositions identified by the assignment \( g \) (a Kratzer-style conditional relation)

**Case studies**

- (13) \( I_{BM_i} = \{ A \text{ is cold; } A \text{ wants to be warmer} \} \)
  \( \text{commit}_{BM_i} = \{ A \text{ is cold; } A \text{ wants to be warmer; } A \text{ put on a sweater makes him warmer} \} \)

By uttering the then-clause, B implicitly committed to the fact that A wanted to be warmer (not just that A is cold), and stated that the best situation in which A is warmer are situations in which A puts on a sweater (bouletic modality).

- (14) If there is light in John’s room, then he is home.
  \( I_{BM_i} = \{ \text{there is light in John’s room; that there is light in John’s room indicates that he is home} \} \)

Inspired by Heim (1992):
- The presence of then adds that it is because the antecedent is true (or assumed to be true), that the consequent is true: then signals that the utterance of the consequent is motivated by the information gained from the antecedent.

**Predictions**

When are then-clauses infelicuously uttered?

- Out of the blue: Then needs an antecedent.
- When the antecedent and the consequent are orthogonal: the antecedent doesn’t provide an explanation.
- When it is not possible to identify an antecedent and a consequent standing in a modal relation.

Selected References